

Notice of Allowability

Application No.

09/972,342

Examiner

Con P. Tran

Applicant(s)

MILLER ET AL.

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Reply to Office Action filed 07/24/07.
2. ☒ The allowed claim(s) is/are 36-51.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20071002</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for the examiner's amendment below was given in a telephone interview with the Applicants' Attorney, Mr. Allan A. Fanucci, on October 3, 2007.
3. The application has been amended as follows:

In the Specifications:

Page 1, lines 11, "serial no. xx/xxx,xxx [Atty Docket No. M-11775 US]",
has been replaced by - - Serial No. 09/972,478 - -;

Page 1, lines 13, after "filed concurrently," - - now issued as U.S. Patent
6,729,726, - - has been inserted;

Page 1, lines 13, after "U.S. patent application", "serial no xx/xxx,xxx [Atty
Docket No. M-11776 US]", has been replaced by - - Serial No. 09/972,479 - -;

Page 1, lines 16, after "concurrently," - - now issued as U.S. Patent
6,641,261, - - has been inserted.

In the Claims:

The following listing of claims replaces all prior listings and versions of claims in
this application.

Listing of the Claims:

1-35. (Canceled)

36. (Currently Amended) An earstem for eyeglasses used in a
communication system comprising:

- a temple portion,
- a speaker support portion for supporting a speaker mount, the speaker
support comprising a loop in the earstem, with the loop slidably retaining the speaker
mount between the "legs" of the loop for motion along the axis of the loop so that the
position of the speaker mount can be adjusted by a wearer along two axes to be over at
least a portion of the wearer's concha, wherein the two axes are inclined with respect to
each other and parallel to the wearer's external ear,
- an earpiece portion, wherein the joined temple, speaker support, and
earpiece portions are adapted and configured to support the speaker mount away from

Art Unit: 2615

a wearer's outer ear with a gap sufficient to permit the wearer to hear environmental sounds without significant obstruction; and

a microphone mount that is carried by the temporal portion, wherein the microphone mount further comprises:

a cavity within the earstem for retaining a microphone, and

a first port inclined downward and forward for permitting entry of a wearer's voice into the cavity;

a second port inclined upward and rearward for permitting entry of environmental sounds into the cavity; and

a gradient microphone retained within the cavity.

37. (Currently Amended) An eyeglasses communication system comprising:
eyeglasses comprising at least one earstem of claim 36, and a speaker
and a microphone carried by the earstem,
a wearer unit operably coupled to the speaker and the microphone.

38. (Previously Presented) The system of claim 37 wherein the wearer unit
comprises a personal digital assistant.

39. (Previously Presented) The system of claim 37 wherein the wearer unit
comprises a cellular telephone.

40. (Previously Presented) The system of claim 37 wherein the wearer unit comprises a personal wireless unit for locally and wirelessly relaying signals to and from the speaker and microphone.

41. (Currently Amended) An eyeglasses local communication system comprising:

a plurality of eyeglasses, each of the eyeglasses comprising at least one earstem of claim 37, and a speaker and a microphone carried by the earstem,

a plurality of wireless wearer units, each wireless wearer unit operably coupled to the speaker and microphone associated with one of the eyeglasses associated and relaying locally and wirelessly signals to and from the coupled speaker and microphone, and

at least one base station wirelessly and operably coupled to the plurality of wireless wearer units.

42. (Previously Presented) The system of claim 41 wherein the base station further comprises:

an interface to an equipment, and

a programmable device executing one or more processes that translates between voice signals exchanged with at least one of the eyeglasses and equipment signals exchanged with an equipment through the equipment interface, wherein

Art Unit: 2615

information can be exchanged between a wearer of the eyeglasses and an interfaced equipment.

43. (Previously Presented) The system of claim 41 wherein the base station further comprises:

a programmable device executing one or more processes that route voice signals between at least two of the eyeglasses so that wearers of the eyeglasses can communicate with each other.

44. (Previously Presented) The system of claim 41 wherein communication system is local to a patient care environment.

45. (Previously Presented) The system of claim 44 wherein the patient care environment comprises one or more operating rooms.

46. (New) The earstem of claim 36 wherein the loop is a "U"-shaped loop and is inclined downward and rearward over a wearer's ear to permit motion of the speaker mount over the wearer's concha.

47. (New) The earstem of claim 46 wherein the speaker mount further comprises:

a rotatably mounted speaker with an axis of rotation eccentric with respect to the speaker mount,

wherein rotation of the rotatably mounted speaker causes the speaker to move in an approximately vertical direction.

48. (New) The earstem of claim 47 wherein the speaker is arranged and positioned over the intertragic notch of the wearer's ear.

49. (New) The earstem of claim 36 further comprising a microphone mount.

50. (New) The earstem of claim 49 wherein the microphone mount is carried by the temporal portion.

51. (New) The earstem of claim 49 wherein the microphone mount comprises:

a cavity within the earstem for retaining a microphone, and
a first port inclined downward and forward for permitting entry of a wearer's voice into the cavity.

Reason for Allowance

4. **Claims 36-51** are allowed which have been re-numbered as to 1-16 respectively.

The following is an examiner's statement of reasons for allowance:

Regarding independent **claim 36**, the prior art fails to teach or suggest an earstem for eyeglasses used in a communication system comprising: a speaker support portion for supporting a speaker mount, the speaker support comprising a loop in the earstem, with the loop slidably retaining the speaker mount between the "legs" of the loop for motion along the axis of the loop so that the position of the speaker mount can be adjusted by a wearer along two axes to be over at least a portion of the wearer's concha, wherein the two axes are inclined with respect to each other and parallel to the wearer's external ear; an earpiece portion, wherein the joined temple, speaker support, and earpiece portions are adapted and configured to support the speaker mount away from a wearer's outer ear with a gap sufficient to permit the wearer to hear environmental sounds without significant obstruction; and a microphone mount that is carried by the temporal portion, wherein the microphone mount further comprises: a cavity within the earstem for retaining a microphone, and a first port inclined downward and forward for permitting entry of a wearer's voice into the cavity; a second port inclined upward and rearward for permitting entry of environmental sounds into the cavity; and a gradient microphone retained within the cavity in combination with other limitations, as specified in the independent claim 1.

Art Unit: 2615

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Con P. Tran whose telephone number is (571) 272-7532. The examiner can normally be reached on M - F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Vivian C. Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cpt CPJ
October 3, 2007


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